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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/760,950

01/15/2001

Eiichi Uriu

YAMAP0347USD

5487

7590

11/04/2004

Thomas W. Adams  
Renner, Otto, Boisselle, & Sklar, LLP  
19th Floor  
1621 Euclid Avenue  
Cleveland, OH 44115

EXAMINER

NGUYEN, TUYEN T

ART UNIT

PAPER NUMBER

2832

DATE MAILED: 11/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

A2

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/760,950	URIU ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	TUYEN T NGUYEN	2832	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 August 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3,5-7 and 28-39 is/are pending in the application.
- 4a) Of the above claim(s) 34-39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-7 and 28-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/19/2003</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

Claims 34-39 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species/invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 8/12/2004.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 and 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mitoguchi et al. [US 6,593,841] in view of Takahashi et al. [US 4,322,698].

Mitoguchi et al. discloses a planar transformer comprising :

- a plurality of fine, continuous conductive patterns having a thickness of 10 $\mu$ m or more and a width to thickness ratio from 1 to less than 5 [column 32, lines 14-21]; and
- a plurality of magnetic insulative layers and at least one conductive pattern formed therebetween.

Mitoguchi et al. discloses the instant claimed invention except for the specific arrangement of the magnetic insulation layers and the conductive patterns.

Takahashi et al. discloses an inductor device [figure 34] comprising a plurality of conductive patterns [122, 124], each disposed between two magnetic insulation layers [121, 123,

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125], wherein the magnetic insulation layer is in contact with the conductive pattern and the magnetic insulation layers contact one another in the area not in contact with the conductive pattern.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the magnetic insulation layers and conductive patterns arrangement of Takahashi et al. in Mitoguchi et al. for the purpose of reducing the thickness of the device.

Regarding claims 3 and 30, the specific shape of the conductive pattern would have been an obvious design consideration based on the intended application use.

Claims 7 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mitoguchi et al. in view of Takahashi et al. as applied to claims 1-3 and 28-30 above, and further in view of Uriu et al. [US 5,647,966].

Mitoguchi et al. in view of Takahashi et al. discloses the instant claimed invention except for the use of the specific silver plating liquid.

Uriu et al. discloses a conductive pattern for an electronic form of silver plating liquid contain no cyanide.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the silver plating liquid of Uriu et al. to form the conductive pattern of Mitoguchi et al., as modified, for the purpose of facilitating manufacturing.

***Allowable Subject Matter***

Claims 5-6 and 31-32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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***Response to Arguments***

Applicant's arguments with respect to claims 1-3, 5-7 and 28-33 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TUYEN T NGUYEN whose telephone number is 571-272-1996. The examiner can normally be reached on M-F 8:30-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ELVIN ENAD can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TTN *TTN*

*Tuyen T. Nguyen*